

Schedule for Undefined Areas To Be Partitioned

For each undefined geographic area, complete up to 300 Latitude/Longitude combinations for every 3 degrees azimuth, using NAD83 Datum. Attached additional Schedule C's if necessary.

Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	37-20-43.7 N	094-38-25.9 W
2	36-54-47.5 N	090-27-46.7 W
3	36-21-11.4 N	090-29-29.1 W
4	36-45-17.5 N	094-38-14.7 W

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Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	37-27-22.0 N	094-24-31.5 W
2	37-26-45.1 N	092-06-25.4 W
3	36-34-08.9 N	092-07-06.1 W
4	36-34-02.0 N	094-23-17.6 W

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Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	37-50-17.0 N	094-10-36.7 W
2	37-49-51.3 N	093-37-52.1 W
3	36-51-36.1 N	091-04-08.7 W
4	36-25-55.1 N	091-05-46.3 W
5	36-24-48.5 N	093-42-26.7 W
6	37-18-54.6 N	094-11-38.6 W

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Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	38-04-57.7 N	094-36-48.4 W
2	37-36-03.9 N	091-45-20.5 W
3	37-03-59.9 N	091-46-41.2 W
4	36-28-58.3 N	093-18-24.3 W
5	36-28-24.9 N	094-05-13.5 W
6	37-26-40.4 N	094-36-45.2 W

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Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	40-40-30.4 N	093-29-55.3 W
2	40-40-52.5 N	092-40-43.5 W
3	39-46-25.8 N	092-40-29.5 W
4	39-54-01.0 N	093-06-12.3 W
5	39-50-47.3 N	093-29-16.6 W

Schedule for Undefined Areas To Be Partitioned

For each undefined geographic area, complete up to 300 Latitude/Longitude combinations for every 3 degrees azimuth, using NAD83 Datum. Attached additional Schedule C's if necessary.

Latitude (DD-MM-SS.S-D)		Longitude (DDD-MM-SS.S-D)
1	40-40-27.6 N	094-01-12.2 W
2	40-40-41.2 N	093-05-33.3 W
3	40-05-38.0 N	093-05-33.7 W
4	40-05-37.5 N	094-00-12.0 W

Attachment(s):

Type	Description	Date Entered
W	<u>Description of Application and Request for Waiver</u>	04/27/2012

DESCRIPTION OF APPLICATION AND REQUEST FOR WAIVER

By this application, Motorola Solutions, Inc. (“MSI”),¹ seeks Federal Communications Commission (“FCC”) consent to the partial assignment of its license issued under call sign WQHE711 to the State of Missouri. The license for Station WQHE711 was partially assigned to Motorola from MariTEL, Inc., under ULS File No. 0002438744 and authorizes MSI to operate on frequencies in VHF Public Coast Service Area (“VPCSA”) No. 4 – Mississippi River using the channel pairs listed in Section 80.371(c) of the FCC’s rules.²

Disaggregation and Partitioning

Specifically, MSI proposes to disaggregate certain channels from its license in areas partitioned by the coordinates listed in the attached application on FCC Form 603 so that the State may construct 24 base station locations listed in the table under Exhibit A and operate associated mobiles to support a private land mobile radio system to meet the communications needs of its public safety-related and homeland security operations.

Provision of Public Safety Communications

Pursuant to Section 20.9(b) of the Commission’s rules, 47.C.F.R. §20.9(b)(2010), the State of Missouri certifies that it will not provide commercial mobile radio services (“CMRS”). The State provides public safety services within the meaning of Section 337(f)(1) of the Communications Act of 1934, as amended, *i.e.*, services the sole or principal purpose of which is to protect the safety of life, health, or property, that are provided by state or local government entities or by nongovernmental organizations that are authorized by a governmental entity whose primary mission is the provision of such services, and that are not made commercially available to the public.³

The FCC’s decision in the *MariTEL/Motorola Order* granting consent to the transaction also allowed public safety entities, such as the State of Missouri, to take assignment of these channels without the need to seek certain additional waivers. In the *VPC Flexibility Order*,⁴ decided after the release of the *MariTEL/Motorola Order*, the FCC

¹ MSI applied for the license at issue in this matter under the corporate name “Motorola, Inc.” On January 4, 2011, Motorola, Inc. changed its name to “Motorola Solutions, Inc.” in connection with the restructuring of the company, as approved by the Commission. *See, e.g.*, ULS File No. 0004425243. References in this letter to “Motorola” or “MSI” are intended to be interchangeable.

² 47 C.F.R. § 80.371(c)(2010).

³ *See generally Application for Consent To Partition and Disaggregate Licenses and Requests for Waiver of Part 80 Rules To Permit Use of Maritime Frequencies for Private Land Mobile Radio Communications*, 22 FCC Rcd 579 (2007)(“*MariTEL/Motorola Order*”)(citing 47 U.S.C. §337(f)(1), 47 C.F.R. §90.523).

⁴ *See MariTEL, Inc. and Mobex Network Services, LLC*, 22 FCC Rcd 8971 (2007)(“*VPC Flexibility Order*”).

granted further flexibility to licensees to use VPC spectrum for private land mobile radio (“PLMR”) operations. In particular, the *VPC Flexibility Order* established the rights of VPC licensees to support non-maritime, private land mobile radio operations without a waiver, subject to certain conditions.

The State will comply with the requirements in the *MariTEL/Motorola Assignment Order* and the *VPC Flexibility Order*. In particular, it will:

- Install base station transmitters that are certified under Part 80 of the FCC’s rules.
- Operate base stations at the power levels specified under Part 80. Specifically, base stations (on the 161 MHz side of the channels) will operate subject to a maximum antenna terminal input power of 50 Watts.
- Ensure that the field strength of its operations will not exceed +5 dBu at the shorelines of major navigable waterways.
- Protect against interference to the maritime operations on the spectrum.⁵

In addition, the State will not operate any base stations or mobiles on these channels within 30 miles of the major navigable waterways (*e.g.*, in areas licensed to MariTEL, Inc. or its subsidiaries) and the +5 dBu contour of its operations would not extend to or overlap such waterways.

As described in the *MariTEL/Motorola Assignment Order*, MariTEL, Inc., will be responsible for meeting the other conditions set forth in the *VPC Flexibility Order*, including providing priority to marine-originating traffic and, if required, a channel 16 watch.

⁵ The State understands that: (1) no interference may be caused to current or future authorized maritime communications, including Automatic Identification System (“AIS”) operations; and, (2) it must accept interference from current or future authorized maritime communications, including AIS operations. The U.S. Coast Guard was provided a copy of this application prior to its submission to the FCC.

Request for Waiver

Section 80.123(e) requires licensees to meet the power limits set forth in Section 80.215.⁶ The FCC stated that “these restrictions will allow operational flexibility while ensuring that distress and safety communications from vessels at sea are given priority.”⁷ Essentially, the rules restrict ship and land stations to 25 watts transmitter power output (“TPO”). Power levels permitted for transmitters used for operations licensed under Part 90 are typically higher than the limits in Section 80.215, however, and the State proposes to operate the VPC channels at levels consistent with its Part 90 facilities. The State therefore seeks a waiver of this requirement, so that it may operate mobiles with 50 watts TPO and 45 watts effective radiated power (“ERP”).

Grant of a waiver is justified under Sections 1.3 and 1.925 of the Commission’s rules.⁸ First, a waiver in this case will not undermine the purpose of the rules because the State will provide the required protection to maritime operations. As noted above, the +5 dBu contour of its operations would not extend to or overlap major navigable waterways, as shown in the attachment under Exhibit B. Moreover, the State’s engineers have evaluated the proposed power level in the mobiles that will be deployed in the system, which have zero antenna gain and some line loss, and determined that the requested increase in the TPO from 25 watts to 50 watts would not result in any greater (and perhaps would create less) potential for interference than mobiles operating under the allowable level with a gain of 3 dB.⁹ Thus, it is highly unlikely that its proposed operations will cause interference to maritime operations or adversely affect priority to maritime communications provided by licensees on the channels and in the geographic areas not being acquired by the State.¹⁰

Second, grant of a waiver would promote long-standing policy objectives of the Commission, in particular (1) the deployment of spectrum to meet public safety needs,¹¹ and (2) the efficient utilization of scarce spectrum.¹²

⁶ 47 C.F.R. § 80.123(e)(2010); *see also id.* at § 80.215.

⁷ *See Amendment of the Commission’s Rules Concerning Maritime Communications*, Second Report and Order and Second Further Notice of Proposed Rule Making, PR Docket No. 92-257, 12 FCC Rcd 16949, 16965-66 ¶ 26 (1997) (“Second Report and Order”).

⁸ *Id.* at §§ 1.3, 1.925.

⁹ Moreover, the State’s use of a zero gain antenna, which is typically shorter than an antenna with a 3 dB gain, increases the options for mounting the antennas and reduces the potential for damage to the antenna that could affect its functionality and capability.

¹⁰ Notwithstanding such waiver, however, the State would ensure protection against interference, should it occur, and would immediately address any interference concerns that may arise.

¹¹ *See* Federal Communications Commission, Report to Congress on the Study to Assess Short-Term and Long-Term Needs for Allocations of Additional Portions of the Electromagnetic Spectrum for Federal, State and Local Emergency Response Providers, Submitted Pursuant to Public Law No. 108-458 (2005) (“December 2005 Report to Congress”). The Commission also reiterated that one of its strategic goals for homeland security is “ensuring that essential public health and safety personnel

Build-Out and Construction Obligations

As permitted under Section 80.60(d) of the FCC's rules, MSI indicated in the application through which it obtained the license at issue in this application that the partitioner and disaggregator would satisfy the construction requirements.¹³ Indeed, both the three-year and five-year construction notifications have been filed and accepted for the underlying license.¹⁴

Accordingly, MSI should not be subject to, nor responsible for meeting, the build-out or construction requirements associated with VPCSA No. 4, as disaggregated to MSI. For the same reasons, the State should not be responsible for meeting, the build-out or construction requirements after consummation of the transaction proposed in this application.

Public Interest Statement

The parties submit that the grant of this application and, if deemed required, a waiver of the FCC's rules is in the public interest, convenience, and necessity, as it will permit the development and operation of innovative equipment and functionalities that will be deployed to support the communications of users involved in public safety and homeland security activities.

have effective communications services available to them at all times, and particularly in the event of an emergency. *Id.* ¶ 98.

¹² See generally Spectrum Policy Task Force Report, ET Dkt. No. 02-135, at 16 (Nov. 2002).

¹³ See ULS File No. 0002438744, Exhibit B. Section 80.60(d)(2) states:

Disaggregation. Partial assignors and assignees for license disaggregation have two options to meet construction requirements. Under the first option, the disaggregator and disaggregatee would certify that they each will share responsibility for meeting the substantial service requirement for the geographic service area. ... The second option would allow the parties to agree that either the disaggregator or the disaggregatee would be responsible for meeting the substantial service requirement for the geographic service area.

¹⁴ See generally ULS File Nos. 0002637836 and 0003836436 (Notifications of Construction filed on 06/02/2006 and 05/12/2009 and accepted on 07/05/2006 and 09/21/2009, respectively).

EXHIBIT A

Disaggregated Channels and Partitioned Areas To Be Assigned

Specifically, MSI proposes to disaggregate the channels listed in the table below in the areas to be partitioned by the coordinates provided in the relevant Schedule C attached to the accompanying application on FCC Form 603 so that the State may construct a private land mobile radio system to meet the communications needs of its public safety-related and homeland security operations.

Base Stations on 161 MHz:

Site Name (County)	Latitude/ Longitude (NAD 83)	VPC Channel Nos. ¹⁵	Center Base/Mobile Freq. (MHz)	AMSL (m)	HAAT (m)	Antenna Model	Ant. Hgt (m)	Azimuth	Bandwidth	Base ERP (Watts)	Form 603 Schedule, C Area No.
Alton (Oregon)	36-41-27.2 91-27-21.3	485 28	161.8750/157.2750 162.0000/157.4000	298.5	95.9	TX/RX BA80- 41-DIN	39.6	0	0	126	Area #7
Arcola (Dade)	37-30-50.0 93-54-56.0	485 28	161.8750/157.2750 162.0000/157.4000	330.7	102.4	TX/RX OA40- 41-DIN	69.4	0	0	123	Area #7
Bendavis (Texas)	37-17-47.2 92-11-38.6	484 226	161.8250/157.2250 161.9125/157.3125	466.7	117.3	TX/RX BA80- 41-DIN	61.0	0	0	119	Area #8
Branson (Taney)	36-40-11.7 93-15-14.7	485 28	161.8750/157.2750 162.0000/157.4000	329.5	119.6	TX/RX OA40- 41-DIN	55.5	30	180	203	Area #7
Cassville (Barry)	36-41-32.1 93-49-16.9	484 226	161.8250/157.2250 161.9125/157.3125	456.5	126.0	TX/RX OA40- 41-DIN	76.2	35	180	214	Area #8
Caulfield (Howell)	36-37-12.1 92-6-40.7	424 285	161.8000/157.2000 161.8875/157.2875	310.9	138.6	TX/RX OA40- 41-DIN	100.6	0	180	200	Area #1
Doniphan (Ripley)	36-38-44.3 90-48-02.6	425 286	161.8500/157.2500 161.9375/157.3375	185.6	116.6	TX/RX OA40- 41-DIN	70.4	290	180	182	Area #5
Eagleville (Harrison)	40-27-17.5 93-58-26.5	225 427	161.8250/157.2250 161.9500/157.3500	331.7	145	TX/RX BA80- 41-DIN	115.8	0	0	93	Area #11
Elkton (Hickory)	37-50-42.0 93-25-34.0	284 486	161.8375/157.2375 161.9250/157.3250	309.4	109.5	TX/RX BA80- 41-DIN	36.3	0	0	132	Area #4
Eminence (Shannon)	37-09-11.5 91-21-51.5	284 486	161.8375/157.2375 161.9250/157.3250	261.2	91.8	TX/RX BA80- 41-DIN	56.4	0	0	116	Area #4
Fair Grove (Greene)	37-22-18.5 93-09-41.6	424 285	161.8000/157.2000 161.8875/157.2875	429.5	156.9	TX/RX BA80- 41-DIN	109.7	0	0	102	Area #1

¹⁵ The channel numbers are derived from ITU Recommendation ITU-R M.1084-4, "Interim Solutions for Improved Efficiency in the Use of the Band 156-174 MHz By Stations in the Maritime Mobile Service."

**Exhibit to Form 603
ULS File No. 0004835315**

Site Name (County)	Latitude/ Longitude (NAD 83)	VPC Channel Nos. ¹⁵	Center Base/Mobile Freq. (MHz)	AMSL (m)	HAAT (m)	Antenna Model	Ant. Hgt (m)	Azimuth	Bandwidth	Base ERP (Watts)	Form 603 Schedule, C Area No.
Freistatt (Lawrence)	37-00-05.0 93-52-17.0	225 427	161.8250/157.2250 161.9500/157.3500	431.9	95.2	TX/RX BA80- 41-DIN	63.4	30	180	229	Area #6
Garwood (Reynolds)	37-05-35.1 90-50-37.9	424 285	161.8000/157.2000 161.8875/157.2875	273.1	190.8	TX/RX OA40- 41-DIN	101.8	270	180	158	Area #1
Goodhope (Douglas)	36-56-08.0 92-54-17.9	425 286	161.8500/157.2500 161.9375/157.3375	451.1	99.5	TX/RX BA80- 41-DIN	30.5	0	0	134	Area #5
Granby (Newton)	36-58-46.0 94-15-09.0	425 286	161.8500/157.2500 161.9375/157.3375	378.8	105.7	TX/RX BA80- 41-DIN	70.1	0	0	120	Area #5
Greentop (Adair)	40-20-09.4 92-34-32.0	484 226	161.8250/157.2250 161.9125/157.3125	296.9	88.4	TX/RX BA80- 41-DIN	64.0	0	0	117	Area #3
Hurley (Stone)	36-56-36.2 93-27-49.7	224 426	161.8125/157.2125 161.9000/157.3000	409.0	103.12	TX/RX BA80- 41-DIN	39.6	0	0	251	Area #2
Mansfield (Wright)	37-05-18.0 92-30-49.0	225 427	161.8250/157.2250 161.9500/157.3500	489.6	125.4	TX/RX BA80- 41-DIN	22.86	0	0	135	Area #6
Milan (Sullivan)	40-13-58.3 93-01-57.8	425 286	161.8500/157.2500 161.9375/157.3375	302.1	83.2	TX/RX EA80- 41-DIN	70.1	0	0	214	Area #9
Nevada (Vernon)	37-45-34.0 94-13-20.6	484 226	161.8250/157.2250 161.9125/157.3125	279.5	85.9	TX/RX OA40- 41-DIN	66.4	60	180	227	Area #8
Pineville (McDonald)	36-38-18.0 94-18-22.0	284 486	161.8375/157.2375 161.9250/157.3250	360.0	99.5	TX/RX BA80- 41-DIN	85.3	45	180	217	Area #4
Princeton (Mercer)	40-24-06.1 93-33-20.1	284 486	161.8375/157.2375 161.9250/157.3250	313.3	137.9	TX/RX BA80- 41-DIN	115.8	0	0	93	Area #10
Theodosia (Ozark)	36-37-25.0 92-43-32.0	284 486	161.8375/157.2375 161.9250/157.3250	332.8	154.0	TX/RX BA80- 41-DIN	100.6	0	0	205	Area #4
Troop G (Howell)	37-00-32.0 91-58-56.0	224 426	161.8125/157.2125 161.9000/157.3000	405.4	125.0	TX/RX BA80- 41-DIN	96.0	0	180	207	Area #2

Base stations will operate with a maximum power of 50 watts at the input terminals of the antennas, in accordance with Section 80.215 of the FCC's rules.

Mobile Stations on 157 MHz:

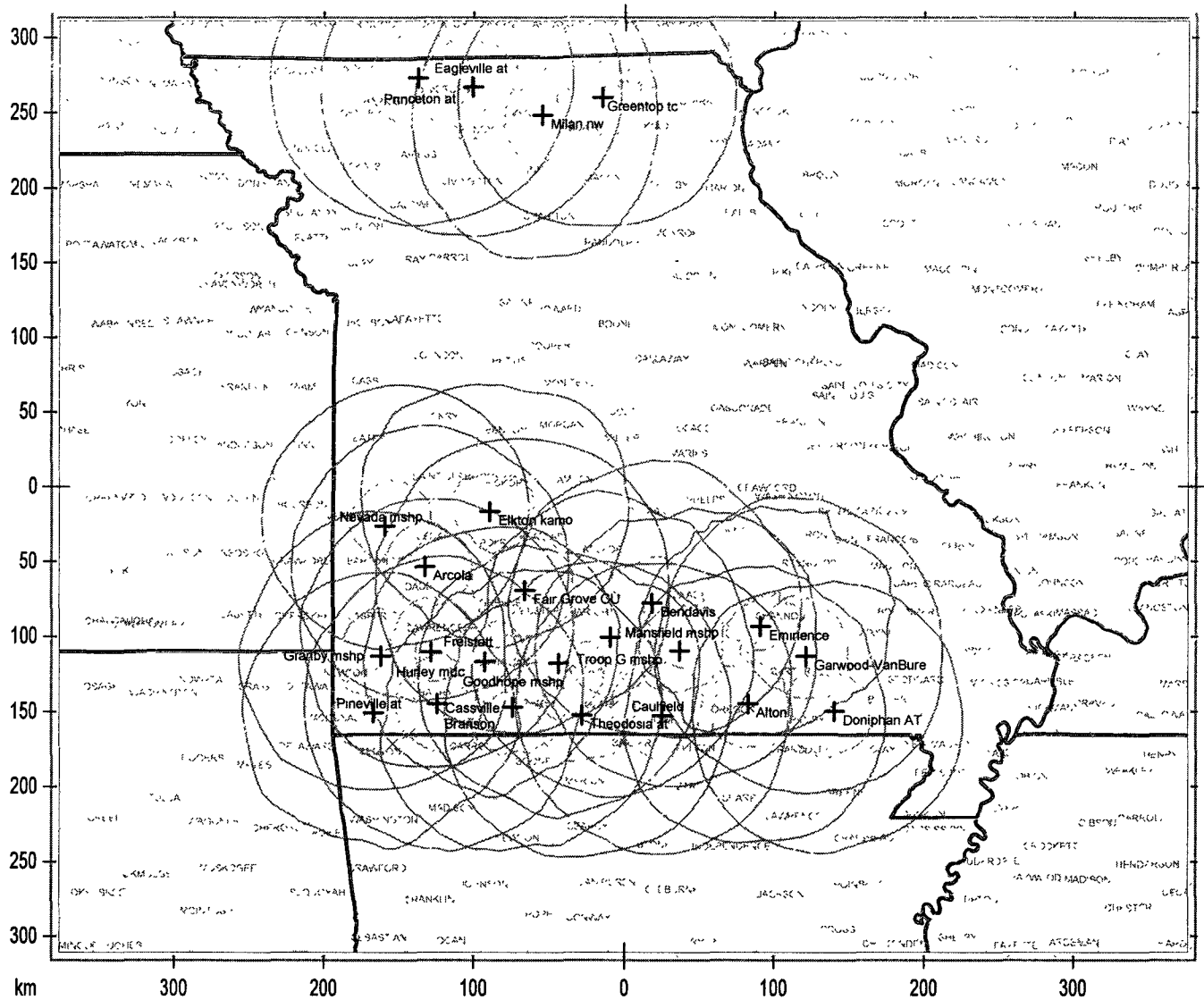
Mobile stations would operate only within the State subject to a maximum transmitter power output ("TPO") of 50 watts and an effective radiated power ("ERP") of 45 watts.

The State recognizes that any modifications to its operations as described in the table above that would extend its aggregate 37 dBu contour beyond the relevant partitioned area could require: (1) further approval from the FCC and incumbent or adjacent geographic area licensees, including MSI, and (2) the filing of additional applications on FCC Form 603 for agency approval.

EXHIBIT B

Contour Study of MOSWIN Sites with Part 80 Channels

Proposed Part 80 Contours (24 Sites)



Red = 5dBu

Green = 37 dBu

County Borders

State Borders